RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Source:

Date Processed by STIC:

ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 05/15/2006
PATENT APPLICATION: US/10/577,973 TIME: 10:02:37

Input Set : A:\50318.013001.txt

Output Set: N:\CRF4\05152006\J577973.raw

```
3 <110> APPLICANT: Ensoli, Barbara
             Caputo, Antonella
              Laus, Michele
              Tondelli, Luisa
              Sparnacci, Katia
      9 <120> TITLE OF INVENTION: Nanoparticles for Delivery of a Pharmacologically Active
Agent
    11 <130> FILE REFERENCE: 50318/013001
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/577,973
C--> 13 <141> CURRENT FILING DATE: 2006-05-03
     13 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/012420
     14 <151> PRIOR FILING DATE: 2004-11-03
     16 <150> PRIOR APPLICATION NUMBER: GB 0325625.2
     17 <151> PRIOR FILING DATE: 2003-11-03
     19 <160> NUMBER OF SEQ ID NOS: 40
     21 <170> SOFTWARE: PatentIn version 3.3
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 309
     25 <212> TYPE: DNA
     26 <213> ORGANISM: Human immunodeficiency virus
     29 <220> FEATURE:
     30 <221> NAME/KEY: CDS
     31 <222> LOCATION: (1)..(309)
     33 <400> SEQUENCE: 1
                                                                               48
     34 atg gag cca gta gat cct cgt cta gag ccc tgg aag cat cca gga agt
     35 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
     38 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt
                                                                               96
     39 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
     40
                    20
                                        25
     42 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tac ggc
                                                                              144
     43 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
                                    40
                                                                              192
     46 agg aag aag cgg aga cag cgt cga aga cct cct caa ggc agt cag act
     47 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
                                                                              240
     50 cat caa gtt tct cta tca aag caa ccc acc tcc caa tcc cga ggg gac
     51 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
     52 65
                            70
     54 ccg aca ggc ccg aag gaa cag aag aag gtg gag aga gag aca gag
                                                                              288
     55 Pro Thr Gly Pro Lys Glu Gln Lys Lys Lys Val Glu Arg Glu Thr Glu
                                            90
                                                                              309
     58 aca gat ccg gtc cat cag tga
     59 Thr Asp Pro Val His Gln
```

Input Set : A:\50318.013001.txt

Output Set: N:\CRF4\05152006\J577973.raw

```
60
63 <210> SEQ ID NO: 2
64 <211> LENGTH: 102
65 <212> TYPE: PRT
66 <213> ORGANISM: Human immunodeficiency virus
68 <400> SEQUENCE: 2
70 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
74 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
78 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
                               40
82 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
86 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
                       70
                                           75
90 Pro Thr Gly Pro Lys Glu Gln Lys Lys Lys Val Glu Arg Glu Thr Glu
91
94 Thr Asp Pro Val His Gln
95
               100
98 <210> SEQ ID NO: 3
99 <211> LENGTH: 261
100 <212> TYPE: DNA
101 <213> ORGANISM: Human immunodeficiency virus
104 <220> FEATURE:
105 <221> NAME/KEY: CDS
106 <222> LOCATION: (1)..(261)
108 <400> SEQUENCE: 3
109 atg gag cca gta gat cct cgt cta gag ccc tgg aag cat cca gga agt
                                                                           48
110 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
113 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt
                                                                           96
114 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Phe
                20
117 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tac ggc
                                                                          144
118 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
121 agg aag aag cgg aga cag cgt cga aga cct cct caa ggc agt cag act
                                                                          192
122 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
125 cat caa gtt tct cta tca aag caa ccc acc tcc caa tcc cga ggg gac
                                                                          240
126 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
127 65
                        70
                                            75
                                                                          261
129 ccg aca ggc ccg aag gaa tag
130 Pro Thr Gly Pro Lys Glu
131
134 <210> SEQ ID NO: 4
135 <211> LENGTH: 86
136 <212> TYPE: PRT
```

Input Set : A:\50318.013001.txt

Output Set: N:\CRF4\05152006\J577973.raw

```
137 <213> ORGANISM: Human immunodeficiency virus
139 <400> SEQUENCE: 4
141 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
145 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Phe
                20
                                    25
149 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
            35
153 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
157 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
                        70
                                            75
158 65
161 Pro Thr Gly Pro Lys Glu
165 <210> SEQ ID NO: 5
166 <211> LENGTH: 261
167 <212> TYPE: DNA
168 <213> ORGANISM: Human immunodeficiency virus
171 <220> FEATURE:
172 <221> NAME/KEY: CDS
173 <222> LOCATION: (1)..(261)
175 <400> SEQUENCE: 5
176 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt
                                                                           48
177 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
180 cag cct aaa act gct ggt acc aat tgc tat tgt aaa aag tgt tgc ttt
                                                                           96
181 Gln Pro Lys Thr Ala Gly Thr Asn Cys Tyr Cys Lys Lys Cys Phe
                                    25
182
                20
                                                                          144
184 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tat ggc
185 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
                                40
                                                                          192
188 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act
189 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
                            55
                                                                          240
192 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc cga ggg gac
193 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
                                                                 80
                                                                          261
196 ccg aca ggc ccg aag gaa tag
197 Pro Thr Gly Pro Lys Glu
201 <210> SEQ ID NO: 6
202 <211> LENGTH: 86
203 <212> TYPE: PRT
204 <213> ORGANISM: Human immunodeficiency virus
206 <400> SEQUENCE: 6
208 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
212 Gln Pro Lys Thr Ala Gly Thr Asn Cys Tyr Cys Lys Lys Cys Phe
```

25

20

213

Input Set : A:\50318.013001.txt

Output Set: N:\CRF4\05152006\J577973.raw

216 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly 220 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr 224 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp 75 70 228 Pro Thr Gly Pro Lys Glu 232 <210> SEQ ID NO: 7 233 <211> LENGTH: 261 234 <212> TYPE: DNA 235 <213> ORGANISM: Human immunodeficiency virus 238 <220> FEATURE: 239 <221> NAME/KEY: CDS 240 <222> LOCATION: (1)..(261) 242 <400> SEQUENCE: 7 48 243 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt 244 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser 10 96 247 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt 248 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe 251 cat tgc caa gtt tgt ttc ata aca gct gcc tta ggc atc tcc tat ggc 144 252 His Cys Gln Val Cys Phe Ile Thr Ala Ala Leu Gly Ile Ser Tyr Gly 255 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act 192 256 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr 50 257 55 259 cat caa gtt tot ota toa aag cag ooc acc too caa too oga ggg gac 240 260 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp 70 261 263 ccg aca ggc ccg aag gaa tag 264 Pro Thr Gly Pro Lys Glu 268 <210> SEQ ID NO: 8 269 <211> LENGTH: 86 270 <212> TYPE: PRT 271 <213> ORGANISM: Human immunodeficiency virus 273 <400> SEQUENCE: 8 275 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser 276 1 279 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe 25 283 His Cys Gln Val Cys Phe Ile Thr Ala Ala Leu Gly Ile Ser Tyr Gly 287 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr 291 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp 292 65 70 75

Input Set : A:\50318.013001.txt

Output Set: N:\CRF4\05152006\J577973.raw

```
295 Pro Thr Gly Pro Lys Glu
296
299 <210> SEQ ID NO: 9
300 <211> LENGTH: 252
301 <212> TYPE: DNA
302 <213> ORGANISM: Human immunodeficiency virus
305 <220> FEATURE:
306 <221> NAME/KEY: CDS
307 <222> LOCATION: (1)..(252)
309 <400> SEQUENCE: 9
310 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt
                                                                           48
311 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
                                                            15
312 1
                                                                           96
314 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt
315 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Phe
                                    25
               20
                                                                          144
318 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tat ggc
319 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
                                40
                                                                          192
322 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act
323 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
                                                                          240
326 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc ccg aca ggc
327 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly
                                                                 80
328 65
                        70
                                            75
330 ccg aag gaa tag
                                                                          252
331 Pro Lys Glu
335 <210> SEQ ID NO: 10
336 <211> LENGTH: 83
337 <212> TYPE: PRT
338 <213> ORGANISM: Human immunodeficiency virus
340 <400> SEQUENCE: 10
342 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
346 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Phe
                20
                                    25
350 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
354 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
        50
358 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly
359 65
362 Pro Lys Glu
366 <210> SEQ ID NO: 11
367 <211> LENGTH: 252
368 <212> TYPE: DNA
369 <213> ORGANISM: Human immunodeficiency virus
372 <220> FEATURE:
373 <221> NAME/KEY: CDS
```

VERIFICATION SUMMARY

DATE: 05/15/2006

PATENT APPLICATION: US/10/577,973

TIME: 10:02:38

Input Set : A:\50318.013001.txt

Output Set: N:\CRF4\05152006\J577973.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date